

**EAST Search History****EAST Search History (Prior Art)**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S31	880	347/11	US_PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/07/04 14:21
S30	1441	347/10	US_PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/07/04 14:21
S32	152	347/10 and ((reversed or revers\$4 or invert\$4 or opposite or oppos \$4 or contrary or counter or transposed or converse or flipped or reverted )adj ((polarity or pulse or voltage or current or signal or bias or power or energy potential )))	US_PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/07/04 14:34
S34	50	347/10 and ((reversed or revers\$4 or invert\$4 or opposite or oppos \$4 or contrary or counter or transposed or converse or flipped or reverted )adj ((polarity or pulse or voltage or current or signal or bias or power or energy potential )))and (meniscus )	US_PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/07/04 16:46
S43	2168	"347"/\$\$\$ and ((diameter or radius)NEAR(nozzle or orifice))	US_PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/07/04 17:24
S47	0	"347"/\$\$\$ and ((\$\$ or less")near (diameter or radius)NEAR(nozzle or orifice))	US_PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/07/04 17:27
S49	0	"347"/\$\$\$ and ((1"? adj "or less")near(diameter or radius)NEAR (nozzle or orifice))	US_PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/07/04 17:30

S53	1475	"347"/\$\$\$ and ((diameter or radius)adj(nozzle or orifice))	US_PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/07/04 17:35
S44	0	"347"/\$\$\$ and ((15 or less")near (diameter or radius)NEAR(nozzle or orifice))	US_PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/07/04 17:35
S54	72	"347"/9 and ((diameter or radius)adj(nozzle or orifice))	US_PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/07/04 17:36
S71	54	347/47.ccls. and (((nozzle or orifice)near3 (diameter or radius)) near2 (micron ))	US_PGPUB; USPAT; USOOR	OR	ON	2008/01/05 20:47
S73	43	S71 not S72	US_PGPUB; USPAT; USOOR	OR	ON	2008/01/05 20:49
S72	11	347/47.ccls. and (((nozzle or orifice)near3 (diameter or radius)) near (micron ))	US_PGPUB; USPAT; USOOR	OR	ON	2008/01/05 20:49
S70	54	347/47.ccls. and (((nozzle or orifice)near3 (diameter or radius)) near2 (micron or micro\$4))	US_PGPUB; USPAT; USOOR	OR	ON	2008/01/05 20:53
S74	7	347/44.ccls. and (((nozzle or orifice)near3 (diameter or radius)) near2 (micron or micro\$4))	US_PGPUB; USPAT; USOOR	OR	ON	2008/01/05 20:54
S76	1	29/890.ccls. and (((nozzle or orifice)near3 (diameter or radius)) near2 (micron or micro\$4))	US_PGPUB; USPAT; USOOR	OR	ON	2008/01/05 20:55
S80	38	"216"/\$\$.ccls. and (((nozzle or orifice)near3 (diameter or radius)) near2 (micron or micro\$4))	US_PGPUB; USPAT; USOOR	OR	ON	2008/01/05 21:01
S85	61	(((nozzle or orifice)near2 (diameter or radius))near (micron or micro\$4))and inkjet	US_PGPUB; USPAT; USOOR	OR	ON	2008/01/05 21:02
S84	138	(((nozzle or orifice)near2 (diameter or radius))near (micron or micro\$4))and ink	US_PGPUB; USPAT; USOOR	OR	ON	2008/01/05 21:02
S83	299	(((nozzle or orifice)near2 (diameter or radius))near (micron or micro\$4))	US_PGPUB; USPAT; USOOR	OR	ON	2008/01/05 21:02
S86	61	(((nozzle or orifice)near2 (diameter or radius))near (micron or micro\$4))and inkjet not (silverbrook.as.)	US_PGPUB; USPAT; USOOR	OR	ON	2008/01/05 21:03

S92	1728	347/47 ccls.	US_PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/09/04 21:14
S93	41	347/47 ccls. and(nozzle near2 taper)	US_PGPUB; USPAT; USOOR; EPO; JPO	OR	ON	2008/09/04 21:16
S95	18	347/47 ccls. and(nozzle near2 taper) and (nozzle near2 con\$4)	US_PGPUB; USPAT; USOOR; EPO; JPO	OR	ON	2008/09/04 21:17
S96	1	347/47.ccls. and(nozzle near2 taper) and (nozzle near2 con\$4) and (nozzle near2 height)	US_PGPUB; USPAT; USOOR; EPO; JPO	OR	ON	2008/09/04 21:18
S98	0	"347"/\$\$.ccls. and(nozzle near2 taper) and (nozzle near2 coni\$3) and (nozzle near2 height)	US_PGPUB; USPAT; USOOR; EPO; JPO	OR	ON	2008/09/04 21:21
S100	4	347/9.ccls. and (charge and electrode and (reverse near2 polarity))	US_PGPUB; USPAT; USOOR	OR	ON	2008/09/04 22:29
S102	0	347/5.ccls. and (charge and electrode and (reverse near3 polarity))	US_PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/09/05 11:11
S105	9	347/10.ccls. and (charge and electrode and (reverse near4 polarity))	US_PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/09/05 11:12
S106	5	347/11.ccls. and (charge and electrode and (reverse near4 polarity))	US_PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/09/05 11:13
S110	184	"347"/\$\$.ccls. and (charge and electrode and (reverse near1 polarity))	US_PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/09/05 11:14
S109	184	"347"/\$\$ ccls. and (charge and electrode and (reverse near1 polarity))	US_PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/09/05 11:14

S108	195	"347"/\$\$.cds. and (charge and electrode and (reverse near2 polarity))	US_PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/09/05 11:14
S107	205	"347"/\$\$.cds. and (charge and electrode and (reverse near4 polarity))	US_PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/09/05 11:14
S112	129	"347"/\$\$.cds. and ((charge with electrode) and (reverse near2 polarity))	US_PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/09/05 11:15
S111	135	"347"/\$\$.cds. and ((charge with electrode) and (reverse near4 polarity))	US_PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/09/05 11:15
S113	5	"347"/\$\$.cds. and ((charge with electrode) and (reverse near2 polarity)) and (meniscus with convex)	US_PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/09/05 11:16
L1	7064	347/5,9,10,11,47,55,57.cds.	US_PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/12/05 11:01
L2	28	347/5,9,10,11,47,55,57.cds. and (((convex near meniscus) or (convex\$1meniscus)) near2 (generator or form\$3 or creat\$3 or generat\$3))	US_PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/12/05 11:07
L3	9	((YASUO) near2 (NISHI)).INV.	USPAT	OR	ON	2009/12/05 11:29
L4	3	((((YAMAMOTO NEAR KAZUNORI). INV.) AND ((NISHI NEAR YASUO). INV.) AND ((IWASHITA NEAR HIRONOBU). INV.) AND ((NISHIO NEAR SHIGERU). INV.) AND ((MURATA NEAR KAZUHIRO). INV.))	US_PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/12/05 11:33

L6	11	(((YAMAMOTO NEAR KAZUNORI).IN.V.) ((NISHI NEAR YASUO).IN.V.) ((WASHITA NEAR HI RONOBU).IN.V.) ((NISHIO NEAR SHIGERU).IN.V.) ((MURATA NEAR KAZUHI RO).IN.V.) ) AND (((convex near meniscus) or (convex \$1meniscus) near2 (generator or form\$3 or creat\$3 or generat\$3))	US_PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/12/05 11:34
L5	1229	(((YAMAMOTO NEAR KAZUNORI).IN.V.) ((NISHI NEAR YASUO).IN.V.) ((WASHITA NEAR HI RONOBU).IN.V.) ((NISHIO NEAR SHIGERU).IN.V.) ((MURATA NEAR KAZUHI RO).IN.V.) )	US_PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/12/05 11:34
L9	0	347/5,9,10,11,47,55,57.cds. and (((opposing or counter) near electrode) and ((diameter or radius) near2 (nozzle or orifice)) and ((flexible or bendable) near layer) and ((channel or barrier) near layer) and ((nozzle or orifice) near (plate or layer)) and ((eject \$4 or discharge\$4) near electrode) and charge and (convex near meniscus) and (piezoelectric).CLM.	US_PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/12/05 12:16
L11	0	(((YAMAMOTO NEAR KAZUNORI).IN.V.) ((NISHI NEAR YASUO).IN.V.) ((WASHITA NEAR HI RONOBU).IN.V.) ((NISHIO NEAR SHIGERU).IN.V.) ((MURATA NEAR KAZUHI RO).IN.V.) ) and (((opposing or counter) near electrode) and ((diameter or radius) near2 (nozzle or orifice)) and ((flexible or bendable) near layer) and ((channel or barrier) near layer) and ((nozzle or orifice) near (plate or layer)) and ((eject \$4 or discharge\$4) near electrode) and charge and (convex near meniscus) and (piezoelectric).CLM.	US_PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/12/05 12:17
L15	0	"347"///\$.cds. and (( (opposing or counter) near electrode) and ((diameter or radius) near2 (nozzle or orifice)) and ((flexible or bendable) near layer) and ((channel or barrier) near layer) and ((nozzle or orifice) near (plate or layer)) and ((eject\$4 or discharge\$4) near electrode) and charge and (convex near meniscus) and (piezoelectric)).CLM.	US_PGPUB; USPAT; USOOR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/12/05 12:18

L13	0	Konica.as. and ( ((opposing or counter) near electrode) and ((diameter or radius) near2 (nozzle or orifice)) and ((flexible or bendable) near layer) and ((channel or barrier) near layer) and ((nozzle or orifice) near (plate or layer)) and ((eject\$4 or discharge\$4) near electrode) and charge and (convex near meniscus) and (piezoelectric)). CLM.	US_PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/12/05 12:18
L17	0	((opposing or counter) near electrode) and ((diameter or radius) near2 (nozzle or orifice)) and ((flexible or bendable) near layer) and ((channel or barrier) near layer) and ((nozzle or orifice) near (plate or layer)) and ((eject\$4 or discharge\$4) near electrode) and charge and (convex near meniscus) and (piezoelectric)). CLM.	US_PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/12/05 12:19

## EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L10	0	347/5,9,10,11,47,55,57.cds. and ( ((opposing or counter) near electrode) and ((diameter or radius) near2 (nozzle or orifice)) and ((flexible or bendable) near layer) and ((channel or barrier) near layer) and ((nozzle or orifice) near (plate or layer)) and ((eject\$4 or discharge\$4) near electrode) and charge and (convex near meniscus) and (piezoelectric)). CLM.	USPAT, UPAD	OR	ON	2009/12/05 12:16
L12	0	((YAMAMOTO NEAR KAZUNORI). [INV.] ((NISHI NEAR YASUO). [INV.] ((WASHITA NEAR HIRONOBU). [INV.] ((NISHIO NEAR SHIGERU). [INV.] ((MURATA NEAR KAZUHIRO). [INV.] ) and ( ((opposing or counter) near electrode) and ((diameter or radius) near2 (nozzle or orifice)) and ((flexible or bendable) near layer) and ((channel or barrier) near layer) and ((nozzle or orifice) near (plate or layer)) and ((eject\$4 or discharge\$4) near electrode) and charge and (convex near meniscus) and (piezoelectric)). CLM.	USPAT; UPAD	OR	ON	2009/12/05 12:17

L16	0	"347" / \$\$.cds. and ( ((opposing or counter) near electrode) and ((diameter or radius) near2 (nozzle or orifice)) and ((flexible or bendable) near layer) and ((channel or barrier) near layer) and ((nozzle or orifice) near (plate or layer)) and ((eject\$4 or discharge\$4) near electrode) and charge and (convex near meniscus) and (piezoelectric). CLM.	USPAT; UPAD	OR	ON	2009/12/05 12:18
L14	0	Konica.as. and ( ((opposing or counter) near electrode) and ((diameter or radius) near2 (nozzle or orifice)) and ((flexible or bendable) near layer) and ((channel or barrier) near layer) and ((nozzle or orifice) near (plate or layer)) and ((eject\$4 or discharge\$4) near electrode) and charge and (convex near meniscus) and (piezoelectric). CLM.	USPAT; UPAD	OR	ON	2009/12/05 12:18
L18	0	((opposing or counter) near electrode) and ((diameter or radius) near2 (nozzle or orifice)) and ((flexible or bendable) near layer) and ((channel or barrier) near layer) and ((nozzle or orifice) near (plate or layer)) and ((eject\$4 or discharge\$4) near electrode) and charge and (convex near meniscus) and (piezoelectric). CLM.	USPAT; UPAD	OR	ON	2009/12/05 12:19

12/5/2009 1:48:23 PM

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